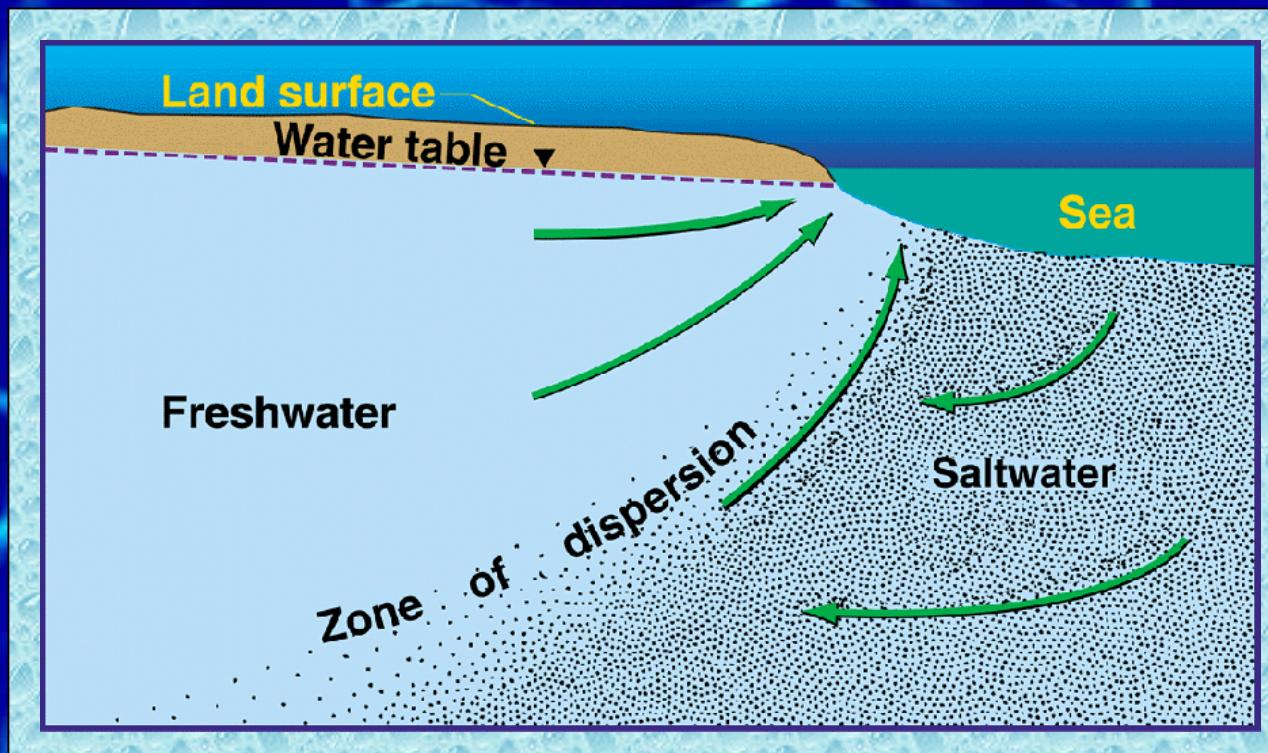
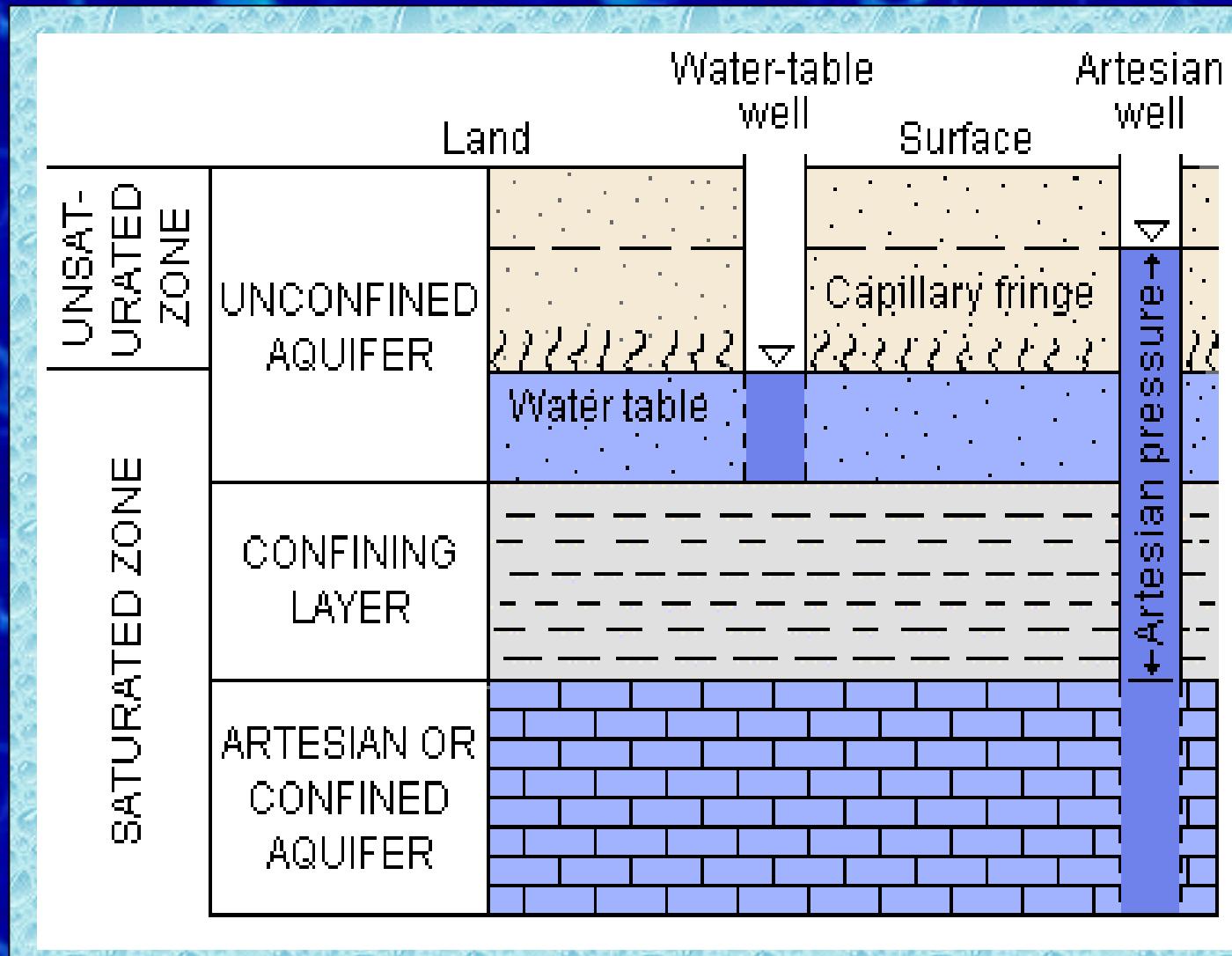




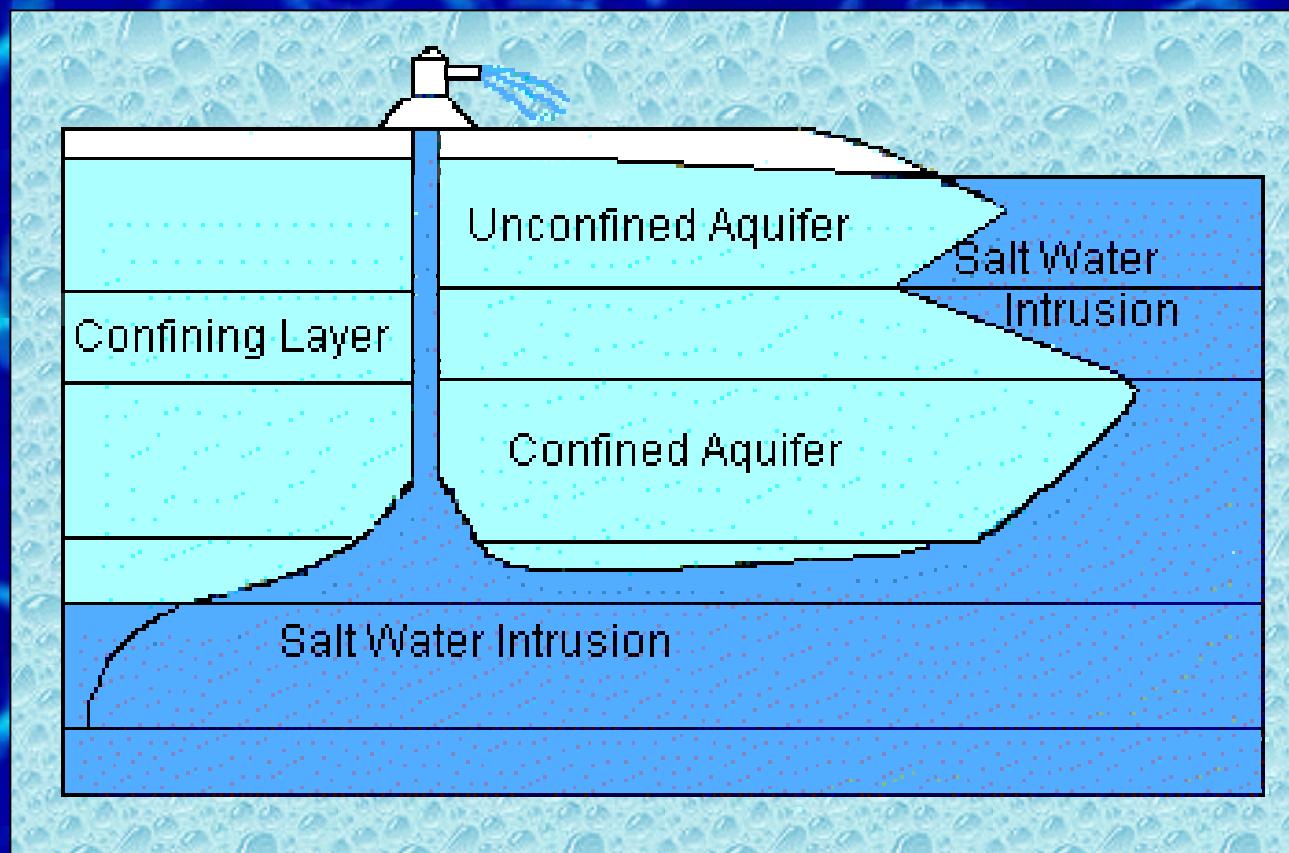
# Sea-water intrusion, its evolution and impact on the coastal aquifer of the agricultural valley of Maneadero, Baja California, Mexico.



# Confined and Unconfined Aquifer sections



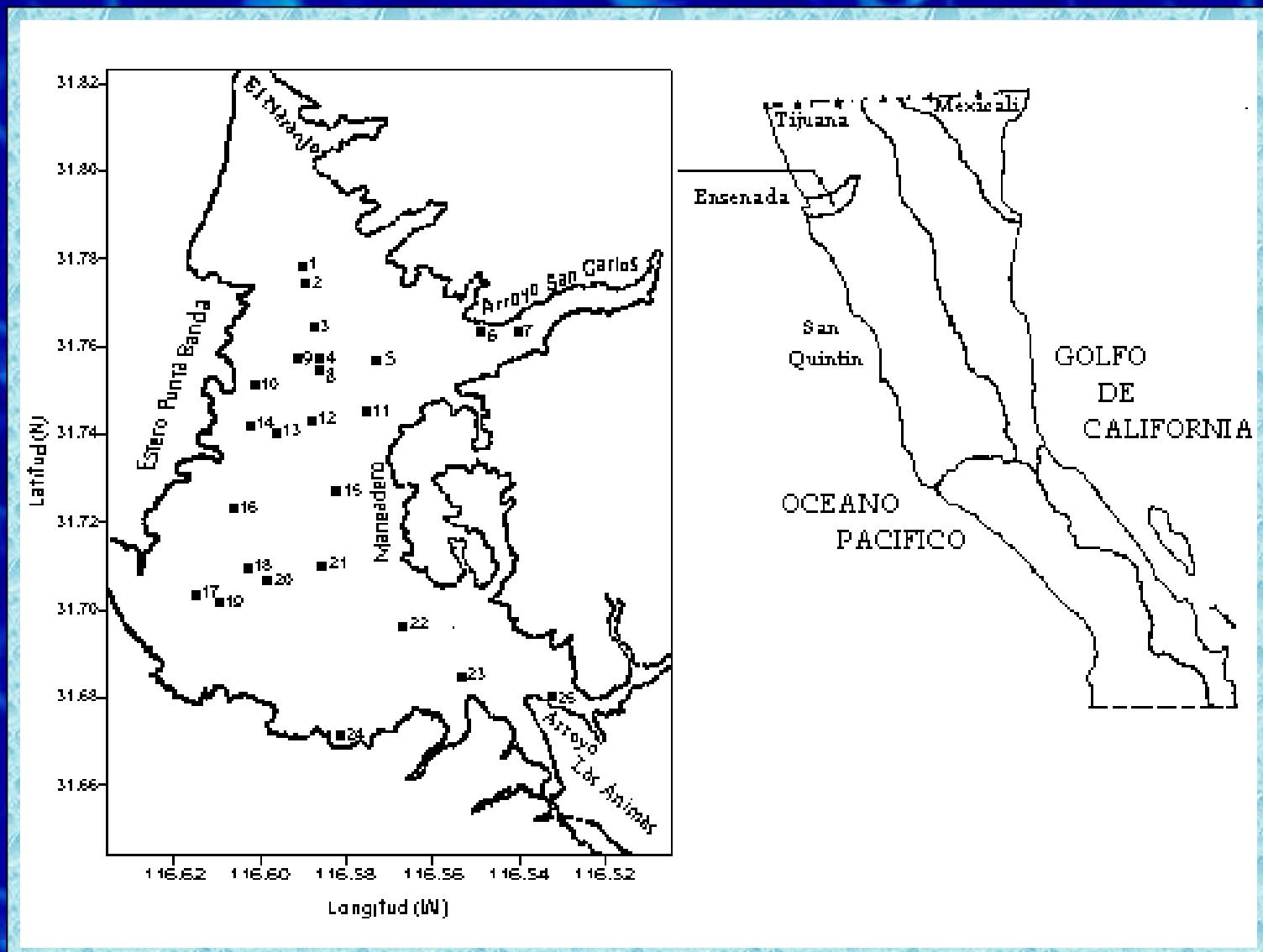
# Seawater intrusion



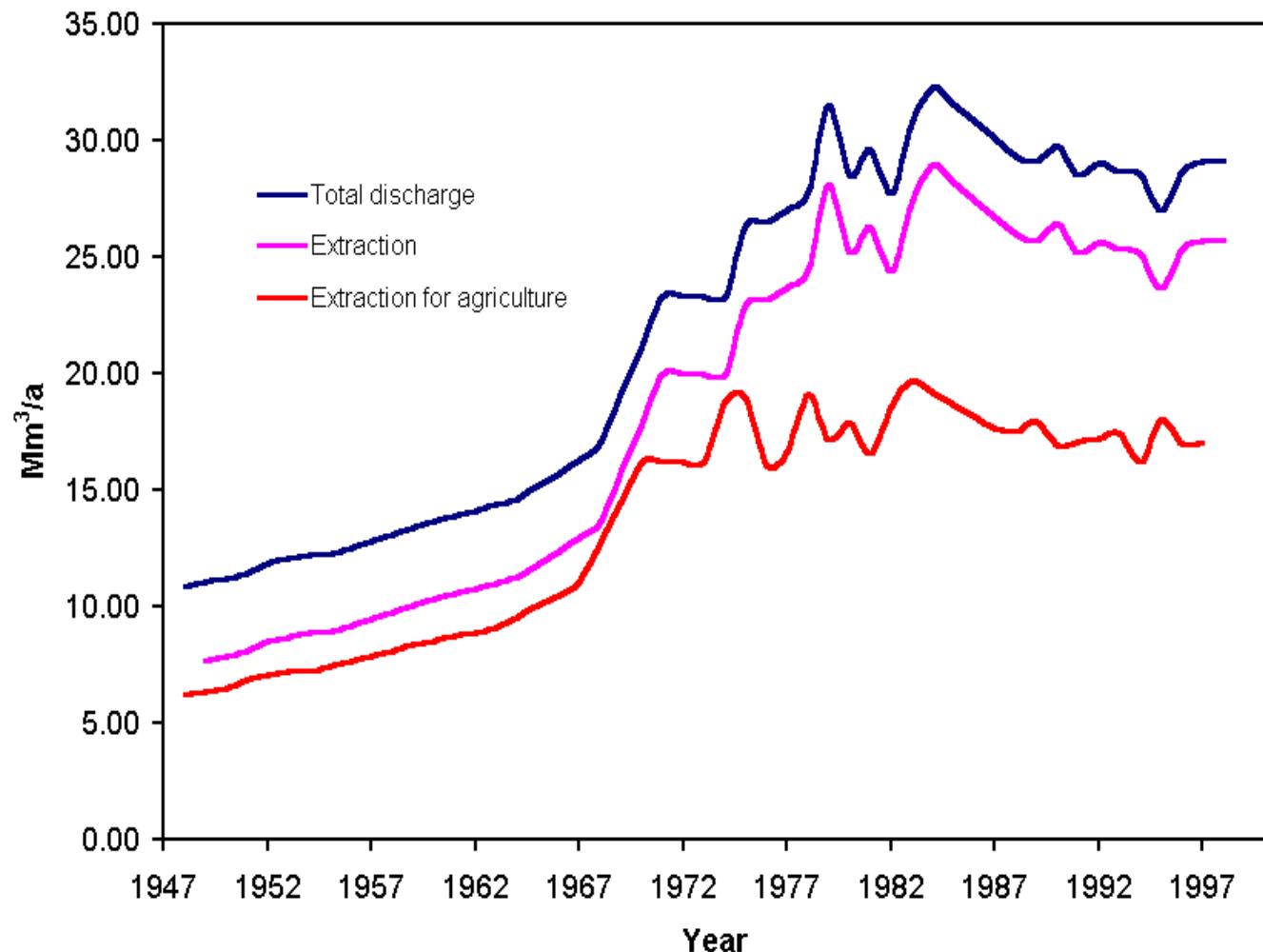
# The agricultural valley of Maneadero



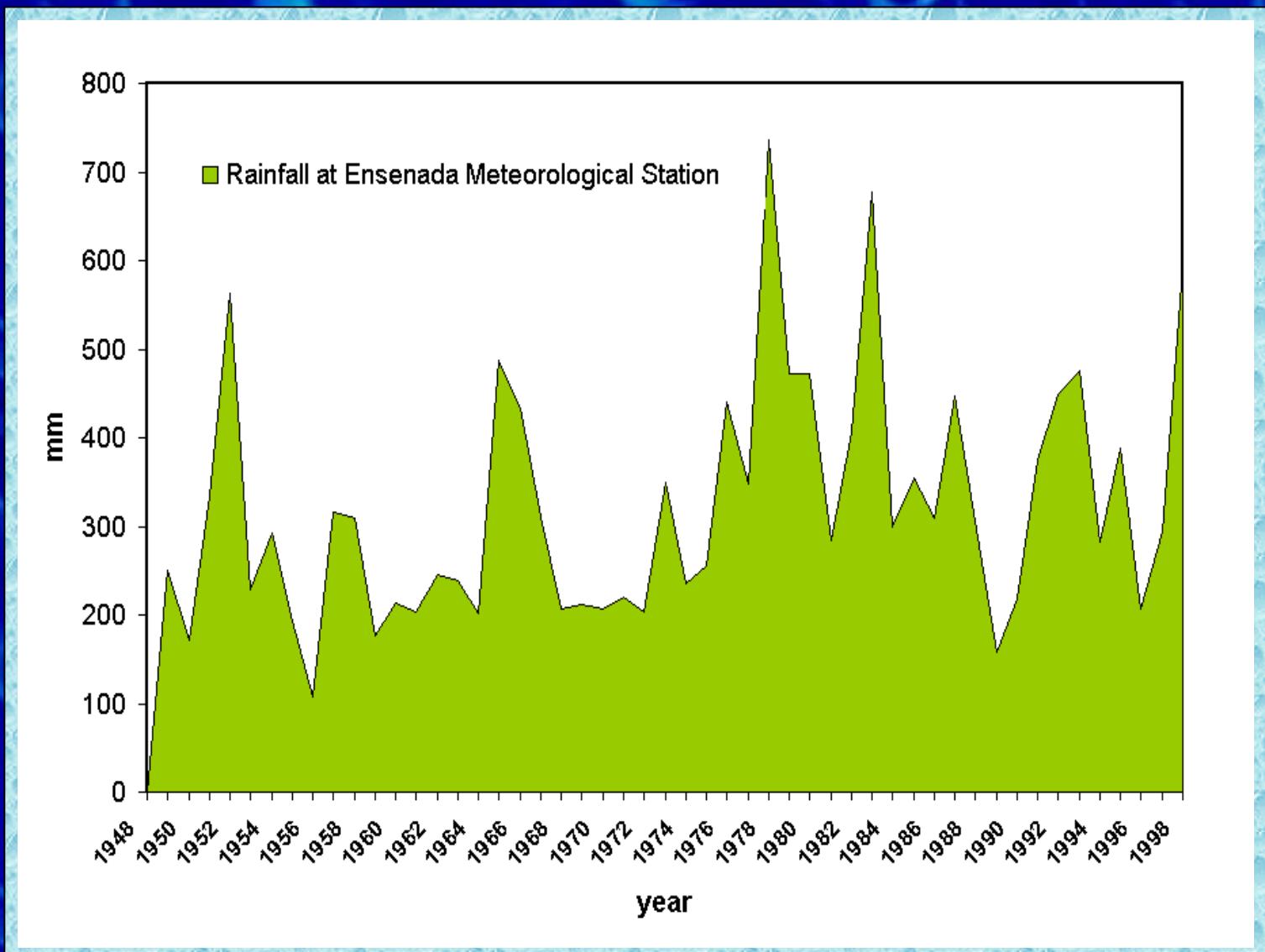
# Hydrological basins in Baja California and study area



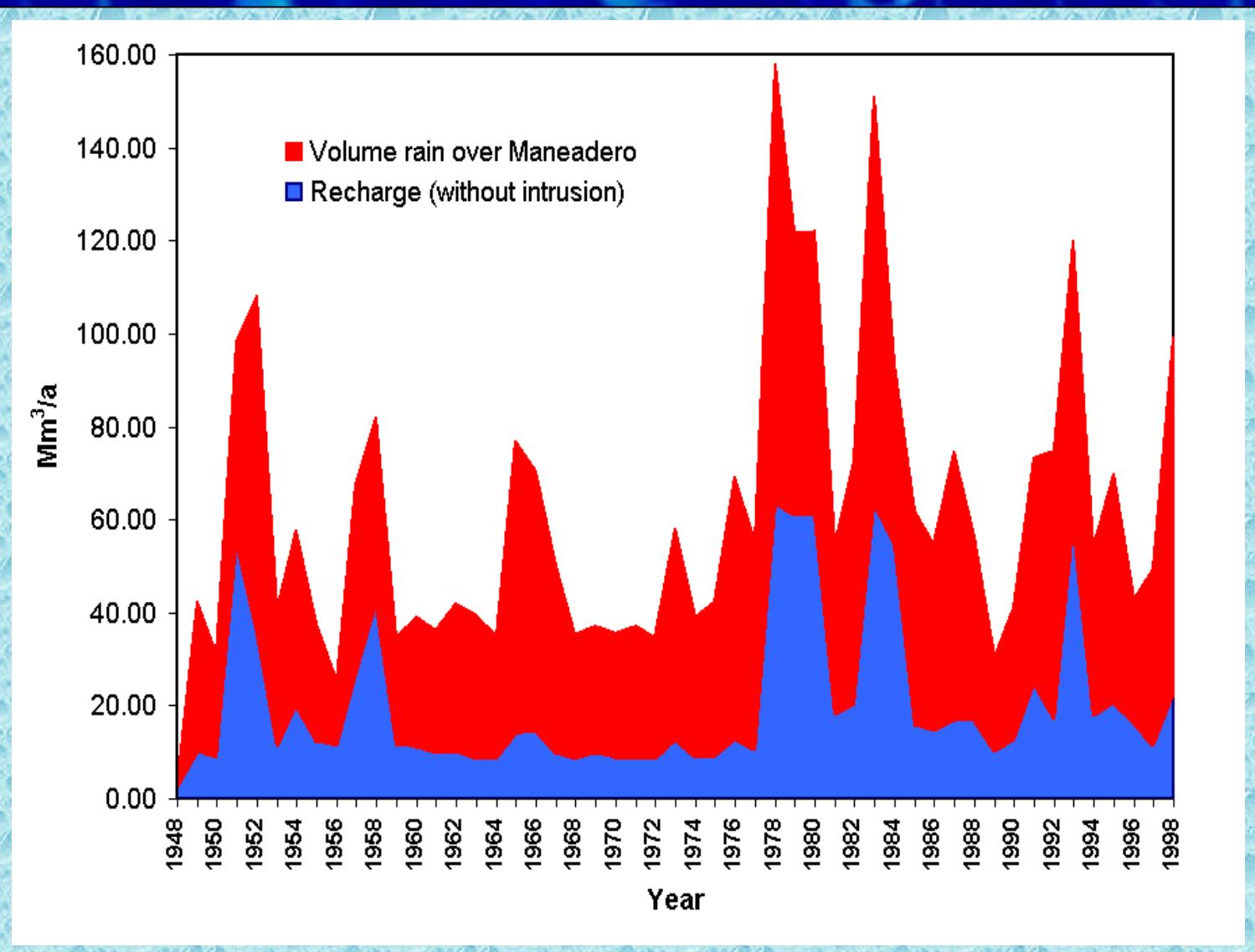
## Total discharge and extraction since 1948



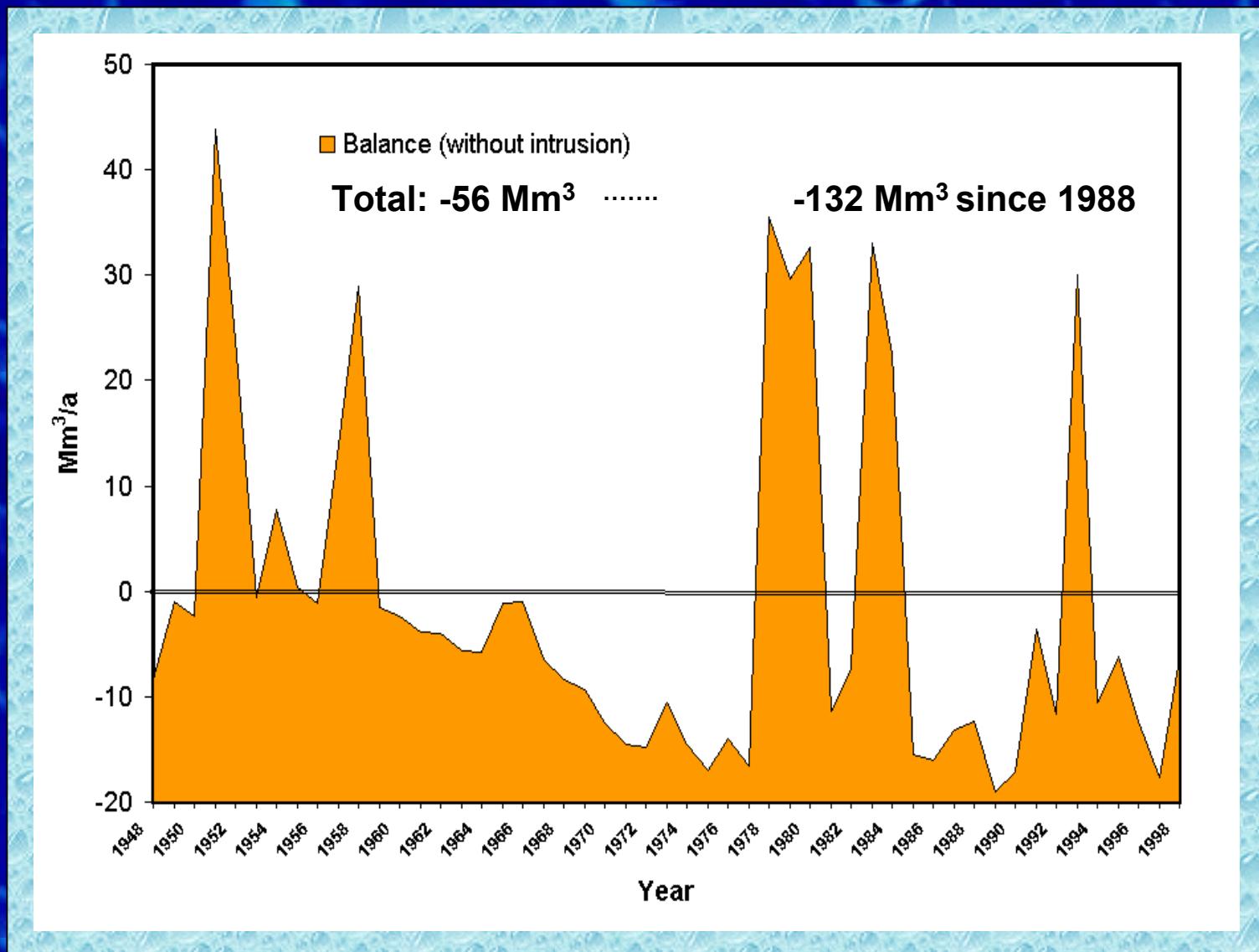
# mm rain at Ensenada meteorological station



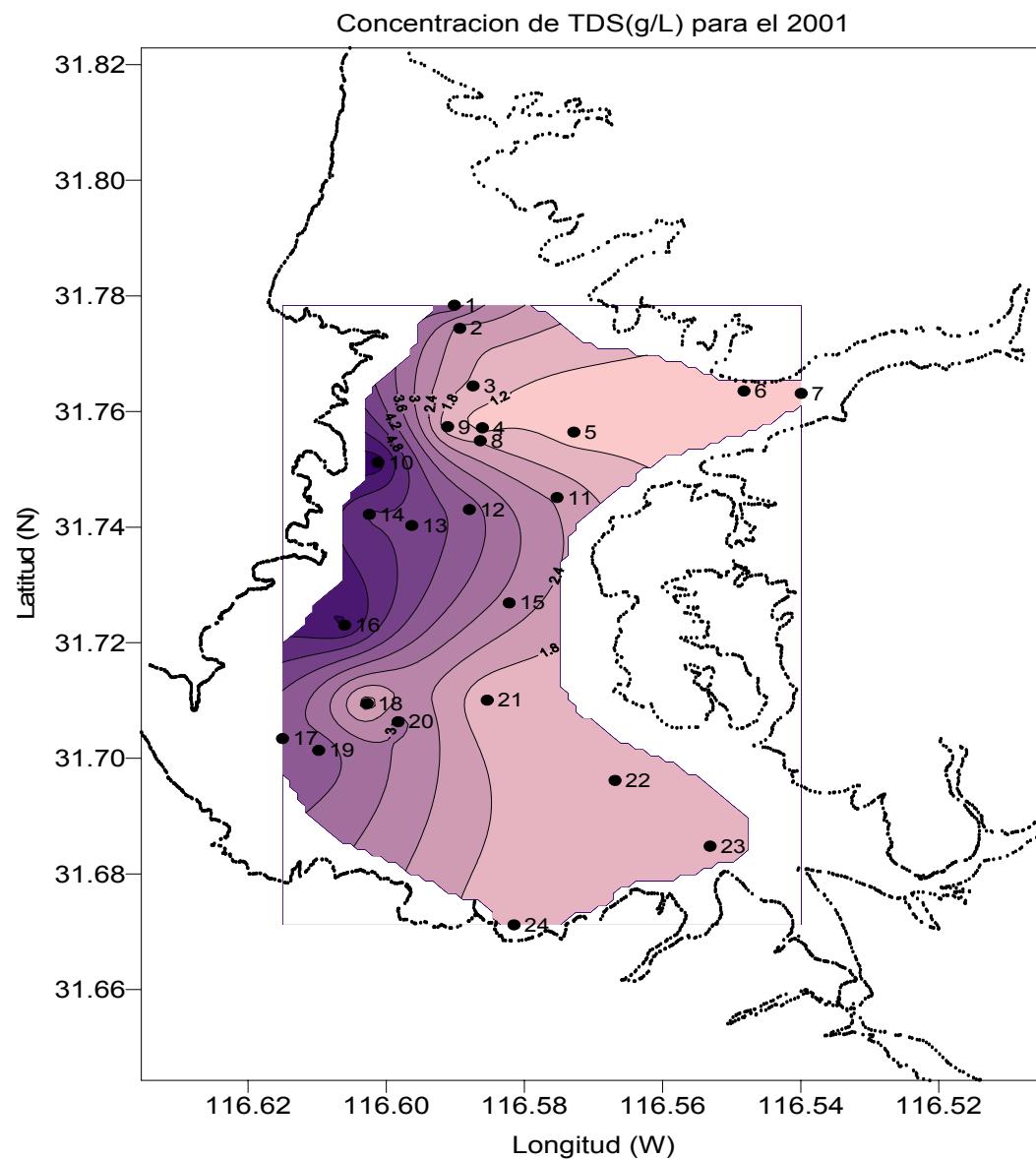
# Rainfall and aquifer recharge in Maneadero



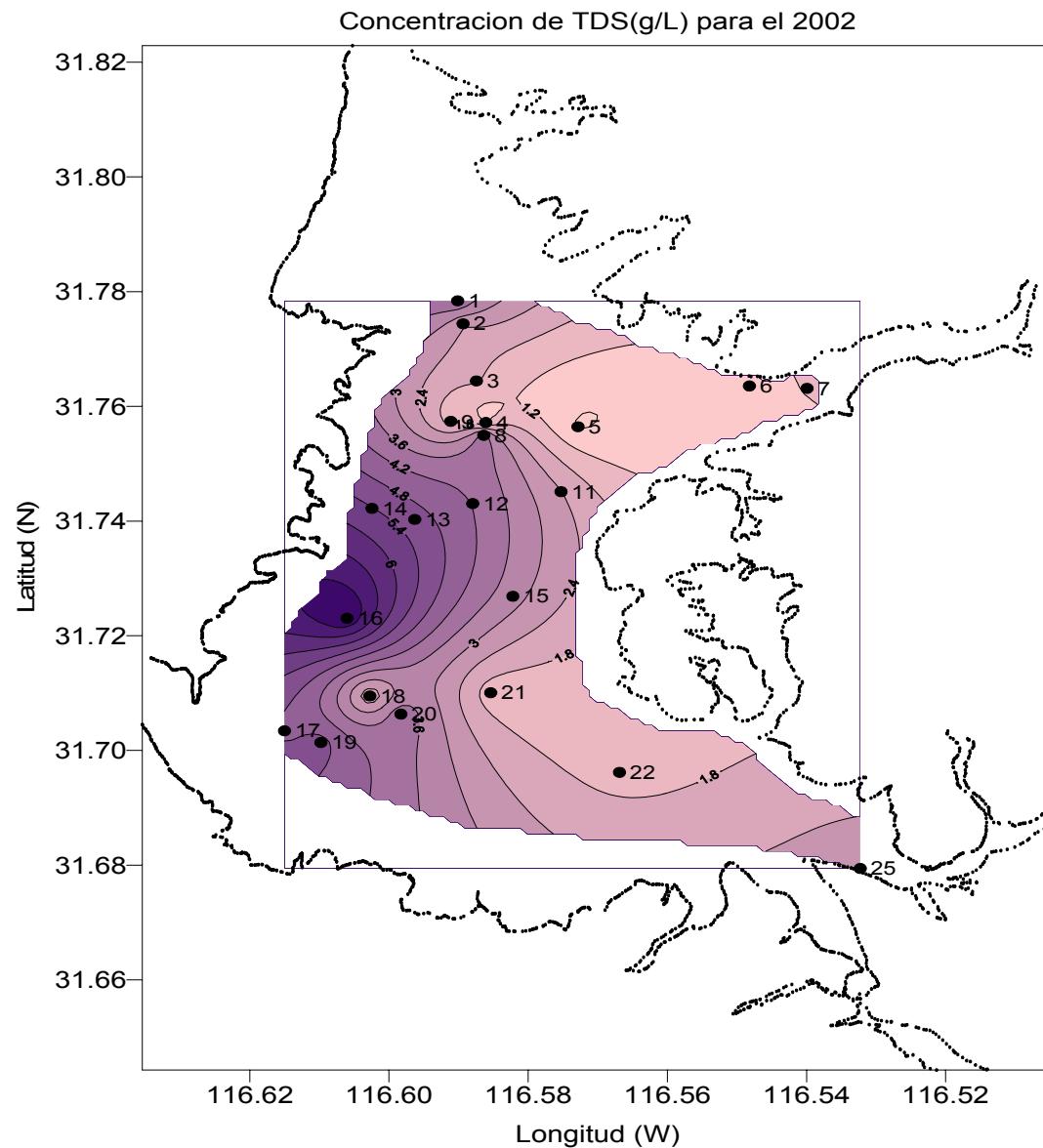
# Estimated balance between recharge and discharge



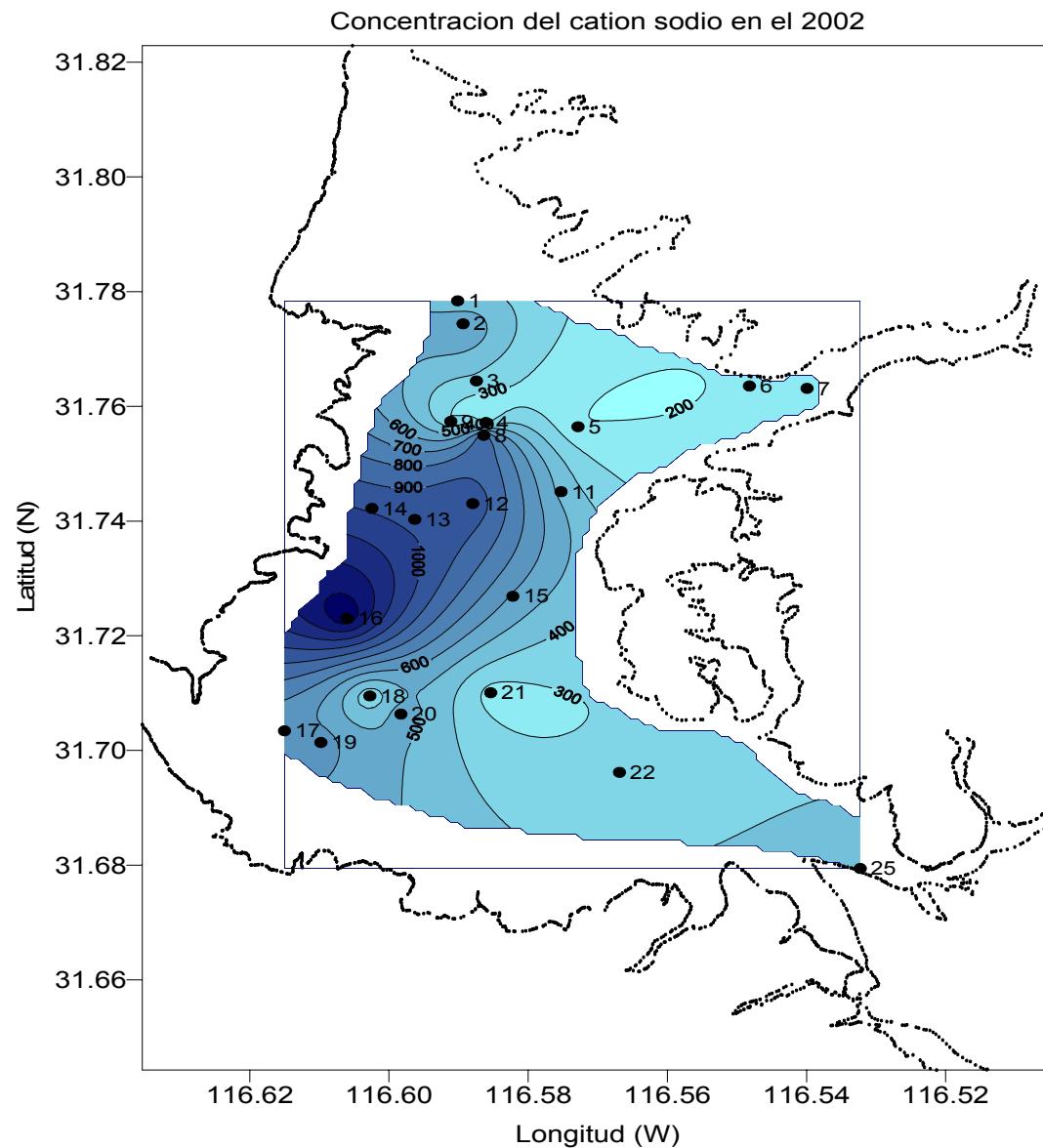
# Groundwater TDS during fall 2001



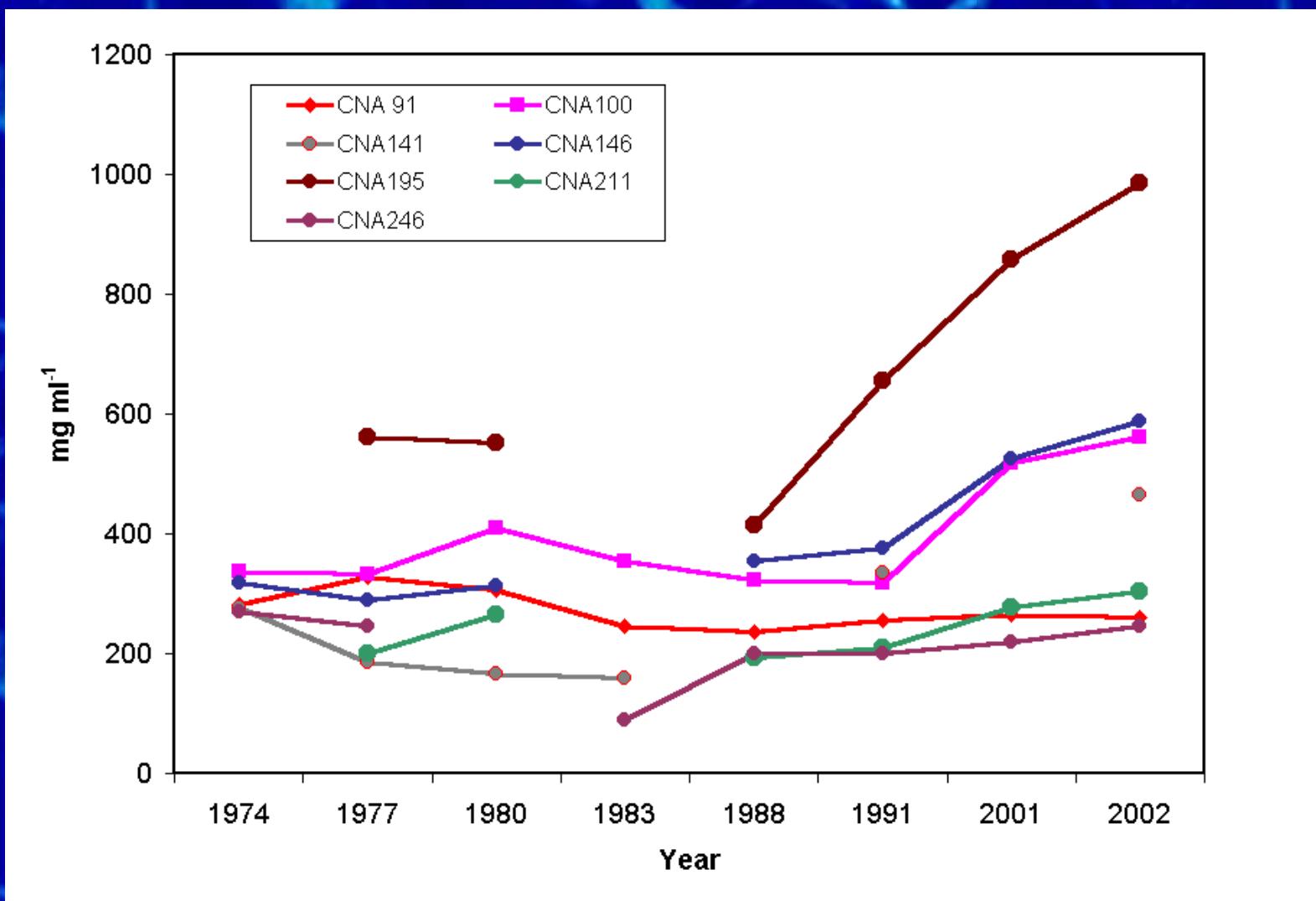
# Groundwater TDS during fall 2002



# Groundwater Na during spring 2002



# Temporal variability of Na concentrations



# Ongoing research and plans of action

Current research at UABC in Maneadero:

Major ion and metal geochemistry.

Arsenic.

Nutrients.

TDS, pH, DO, T and Alkalinity.

Research and immediate actions required:

Short-term monitoring.

Detailed geophysics.

Isotope geochemistry.

Modeling and prediction.

Integral resource management.

Strict policy enforcement.

Water reuse alternatives.

## Acknowledgments

**Sistema de Investigación del Mar de Cortés  
(SIMAC / CONACYT)**

**UABC**

**Work team: V. Camacho, L. Mendoza, J. Carriquiry, P. Castro, V. Macias, E. Sánchez.**